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decoding means for decoding the first transport stream data and the second transport stream data; and

an output terminal for supplying the first and second transport stream data decoded by the decoding means to a display device for outputting sounds and/or pictures.

REMARKS

Claims 1-9 remain in the application with claims 1-8 having been amended hereby.

As will be noted from the Declaration, Applicants are citizens and residents of Japan and this application originated there.

Accordingly, the amendments made to the specification are provided to place the application in idiomatic English, and the claims are amended to place them in better condition for examination.

An early and favorable examination on the merits is earnestly solicited.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE ABSTRACT OF THE DISCLOSURE

Please amend the Abstract by rewriting same to read as follows.

[The present invention provides] A tuner and receiver apparatus that can output first transport stream data and second transport stream data having excellent bit error rate characteristics for two systems even when a first tuner portion and a second tuner portion are provided on one board. [According to the present invention, a] A first tuner portion is provided on one surface of a board, and a second tuner portion is provided on the other [hand] side of the board.

IN THE CLAIMS

Please amend claims 1-8 by rewriting same to read as follows.

--1. (Amended) A tuner apparatus comprising:

a first tuner portion for receiving a first broadcast wave and outputting first transport stream data achieved by multiplexing encoded data on sounds and/or pictures contained in the first broadcast wave[,]; and

a second tuner portion for receiving a second broadcast wave different from the first broadcast wave and outputting second transport stream data achieved by multiplexing encoded data on sounds and/or pictures contained in the second broadcast wave,

said first and second tuner portions being provided on a circuit board, wherein said first tuner portion is provided on one surface of said circuit board and said second tuner portion is provided on [the other] a reverse surface of said circuit board.

--2. (Amended) The tuner apparatus as claimed in claim 1, wherein said first tuner portion and said second tuner portion are disposed so as not to be confronted to each other through said circuit board.

--3. (Amended) The tuner apparatus as claimed in claim 2, wherein said first tuner portion and said second tuner portion are provided [in the neighborhood of both the] substantially adjacent respective opposite ends of said circuit board[, respectively].

--4. (Amended) The tuner apparatus as claimed in claim 1, wherein a first wire pattern for transmitting the first transport stream data is formed on the [one] surface of said circuit board on which said first tuner portion is provided, and a second wire pattern for transmitting the second transport stream data is formed on the [other] reverse surface of said circuit board on which said second tuner portion is provided.

--5. (Amended) The tuner apparatus as claimed in claim 4, wherein said circuit board has a first wire pattern layer on which said first wire pattern is formed, a second wire pattern layer on which said second wire pattern is formed, and an insulating layer sandwiched between said first wire pattern layer and said second wire pattern layer, and at least one ground layer for intercepting undesired radiation noises of said first tuner portion and said second tuner portion [is] formed on said insulating layer.

--6. (Amended) The tuner apparatus as claimed in claim 5, wherein said ground layer has a first ground layer formed so as

to confront said first wire pattern layer so that a first insulating layer corresponding to a part of said insulating layer is sandwiched between said first ground layer and said first wire pattern layer, and a second ground layer formed so as to confront said second wire pattern layer so that a second insulating layer corresponding to a part of said insulating layer is sandwiched between said second ground layer and said second wire pattern layer, said first ground layer and said second ground layer being confronted to each other so that a third insulating layer corresponding to a part of said insulating layer is sandwiched therebetween, [and] whereby said circuit board is formed as a four-layered circuit board having said first wire pattern layer, said second wire pattern layer, said first ground layer and said second ground layer.

--7. (Amended) The tuner apparatus as claimed in claim 6, wherein said four-layered circuit board is formed by attaching a first circuit board comprising said first wire pattern layer, said first insulating layer and said first ground layer and a second circuit board comprising said second wire pattern layer, said second insulating layer and said second ground layer onto both [the] surfaces of said third insulating layer.

--8. (Amended) A receiver apparatus comprising:

a tuner apparatus in which a first tuner portion for receiving a first broadcast wave and outputting first transport stream data achieved by multiplexing encoded data on sounds and/or pictures contained in the first broadcast wave is provided on one surface of a circuit board, and a second tuner portion for receiving a second broadcast wave different from the first broadcast wave and outputting second transport stream data

achieved by multiplexing encoded data on sounds and/or pictures contained in the second broadcast wave is provided on [the other] a reverse surface of said circuit board;

decoding means for decoding the first transport stream data and [said] the second transport stream data; and

an output terminal for supplying the first and second transport stream data [thus] decoded by the decoding means to a display device for outputting [the] sounds and/or [the] pictures.